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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,439	12/13/2001	Jose Albero	01-294	5675

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EXAMINER

CASAREGOLA, LOUIS J

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 03/08/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,439

Applicant(s)

ALBERO ET AL.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,16-21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-29 is/are allowed.
- 6) ☒ Claim(s) 1,2,9-15,22,30-35 is/are rejected.
- 7) ☒ Claim(s) 3,4,7,8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Election

Applicants' response of 11/5/03 adds new claims 22-35, and their subsequent response of 2/2/04 lists claims 22-24 and 26-35 as readable on the elected Figure 2 species. Claims 22-24 and 26-35 are therefore included with previously elected claims 1-4 and 7-15 in the action on the merits set forth below.

Claim Rejections - 35 USC § 112

Claims 10, 11, 13-15, 22, and 30-35 are rejected under 35 USC § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In view of applicants' comments emphasizing that they are not attempting to claim electric, pneumatic, or starting equipment (response, pages 9-10), the rejection under § 112, first paragraph, has been withdrawn. The rejection under § 112, second paragraph, however remains effect as set forth below.

Claim 10 describes a secondary or auxiliary power unit as "providing pneumatic air to said at least one load and electrical loads". This language, if read literally, requires the secondary power unit to send air to an electrical load, which appears to make little sense.

Amended claim 11 now recites that the auxiliary power unit comprises "means for starting" the primary gas turbine engine. It is not clear how the recited "means"

corresponds to the preferred embodiment of the invention. The auxiliary power unit shown in the preferred embodiment does not appear to comprise any structure that would actually link the auxiliary unit to the main engine in such a way that the former could start the latter.

Claim 13 describes the secondary power unit as "having an environmental control system", and claim 14 further describes this unit as integrating "an energy power unit, an environmental control system, and an engine start system". It is not clear how these limitations are to be construed since the features recited do not appear to be actually shown in the preferred embodiment of the invention. Note also that an environmental control system normally comprises a series of ducts, fans, heat exchangers, filters, etc. necessary to supply heated, cooled, and/or pressurized air to an aircraft cabin. This entire system would not appear to fit in an engine core compartment as claimed, and it is not clear what specific equipment or system portion is actually covered by the present claim language. Furthermore, it is not clear what is specifically meant by a so-called "energy power unit", and the recitation of this device in claim 14 is therefore considered ambiguous.

Claim 15 further states that the secondary power unit "comprises means for heating said primary gas turbine engine". It is not clear however precisely what constitutes the "means for heating" -- is it the mere presence of the secondary power unit as a heat engine or is some additional structure involved ?

New claim 30 and related dependent claims 31-35 recite that the secondary power unit is "located radially inside the annular by-pass passage and besides the engine core" (claim 30, lines 6-7). This language is ambiguous. It is not clear whether the description of the secondary unit as located "besides the engine core" means that the secondary unit is placed side-by-side with the engine core, or that the secondary unit is merely a further device in addition to the engine core. Note that in this instance, clear language is absolutely vital for a valid comparison between the claims and the prior art.

Claim Rejections - 35 USC § 102

Claims 1, 2, 9, 12, 15, and 22 are rejected under 35 USC § 102 (b) as being anticipated by Menioux.

The present claims are sufficiently broad to read on prior art power plants integrating multiple gas turbine engines in the manner shown by Menioux. Attention is called for example to Menioux's Figure 1; note that the claimed secondary power means and primary engine read respectively on Menioux's engines 2 and 3. Note also that engines 2 and 3 are located in nacelle cowl 1 and arranged such that engine 2 can be construed as being located in a core compartment of engine 3. It is additionally emphasized that claim language reciting "secondary power means for providing pneumatic air to at least one load" is not worded in such a manner as to be limited

exclusively to the disclosed secondary power means and equivalents thereof (35 USC § 112, 6th paragraph). The claimed secondary power means could be construed as any additional power means used in conjunction with a gas turbine engine and placed in the specified location, and the claimed reference to providing pneumatic air is a mere statement of intended use.

With regard to claim 2, attention is called to the outer wall (unnumbered) of the core compartment containing engine 2. This wall can be construed as an inner cowl which cooperates with nacelle cowl 1 to define a bypass passage.

As concerns claim 15, note that the location of engine 2 will inherently cause some of the waste heat from this engine to be transferred to engine 3.

New claim 22 is essentially similar to claim 2 with the added limitation that the inner cowl is "located radially inward of the nacelle cowl". Menioux's corresponding inner cowl structure is in fact likewise located radially inward of his nacelle cowl 1.

Arguments

Applicants' arguments have been considered but have not been found persuasive in overcoming the rejections.

With regard to the § 112 rejection of claims 10, 11, and 13-15, the following comments are offered in reply to the points raised by applicants:

With respect to claim 10, applicants argue that contrary to what is stated in the rejection, the claim does not say that the auxiliary power unit provides pneumatic air to electric loads, but rather, says that this unit "provides pneumatic air to at least one load and provides electric loads for an aircraft" (response, page 9). Even if this were true, however, claim 10 would still appear to make little sense. By any normal definition, a load is a power consumer, and it is not seen how the "auxiliary power unit" in the present invention can reasonably qualify as an electric power consumer.

With regard to the rejection of claim 11, applicants emphasize that the expression, "said pneumatic air", has now been deleted (response, page 9). The amended claim language however is as flawed as the original language. As indicated above, the new claim language now includes "means for starting" the primary engine, but no such means is actually shown in the preferred embodiment of the invention.

As concerns the rejection of claims 13-14, applicants further emphasize that the claims are supported by language on page 5, lines 4-22 of the specification (response, page 10). The cited section of the specification however does not explain how the auxiliary power unit per se can be accurately described as "having an environmental control system" (claim 13), or as being integrated with "an emergency power unit, an environmental control system, and an engine start system " (claim 14). Applicants state that the claims are directed to structure of the secondary or auxiliary power unit, but in the preferred embodiment of the invention, this device is simply a gas turbine engine

and does not appear to have any further structure that would constitute an emergency power unit, an environmental control system, or an engine start system.

In response to the rejection of claim 15, applicants additionally state (page 10) that the mere presence of the secondary power unit provides the claimed function of heating the primary gas turbine engine. If this is the case, then the recited "means for heating the primary gas turbine" is inaccurate and redundant since claim 15 already includes the secondary power unit and there is in fact no further means for heating as recited in the claim.

With regard to the prior art rejection over Mennieux, the following further comments are submitted in reply to applicants' arguments:

Applicants take the position that the interpretation of Mennieux relied upon in the rejection is strained, and specifically, that Mennieux's "core compartment" would be construed by those skilled in the art as the space interior of casing 12/25 rather the space in which secondary engine 2 is located (response pages 10-11). This point is disputed. Contrary to what applicants suggest, the expression "core compartment" does not appear to have any universally accepted meaning in the art, and applicants have submitted no specific evidence to the contrary. The claimed core compartment, moreover, is sufficiently broad to read on any centrally located primary engine compartment, and this would include the compartment in which Mennieux's secondary engine 2 is located.

Applicants further argue that the Mennieux's secondary engine does not provide

air to a pneumatic load, and that contrary to the position taken in the rejection, the pertinent claim language in this case does qualify as a means-plus-function limitation under § 112, sixth paragraph (response, page 11). This point is also disputed. In order to qualify as a means-plus-function limitation under § 112, sixth paragraph, a claimed “means for” must not be modified by further preceding terminology; see *In re Donaldson*, 16F.3d 1189, 29 USPQ2d 1845 . In this instance, the recited means (claim 1, line 7) is preceded by the terms “secondary” and “power”, and hence, the required condition has not been met. Claim language directed to providing air for a pneumatic load is thus legitimately interpreted as a mere statement of intended use. Furthermore, it is emphasized that the only means actually shown in the preferred embodiment of the invention capable of supplying pneumatic air is compressor 32 of secondary power unit 30. Mennioux’ secondary engine 2 includes an equivalent compressor, 4b, and if the present invention’s compressor can be used to supply air to a pneumatic load, than Mennioux’s compressor can certainly be used in the same manner.

Allowable Subject Matter

Claims 23-29 are allowed. (Non-elected claim 25 has been included in this group since it depends from allowed claim 23.) Claims 3, 4, 7, and 8 also contain allowable subject matter but are objected to as depending from rejected parent claims. If rewritten


in independent form, these claims will be allowed. If Claim 3 is allowed, non-elected claims 5 and 6, which depend from claim 3, will additionally be allowed.

Final Rejection

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

L. J. Casaregola
703-308-1027 (M-F; 7:30-4:00)
703-872-9306 FAX
March 8, 2004


LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached at 703-308-2675.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).